

F.A. PROJECT NO.

NOTES

ASSUMED LIVE LOAD -----MS18 OR ALTERNATE LOADING.

DESIGN FILL-----

FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.

76mm Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.

CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:

1. WING FOOTINGS AND FLOOR SLAB INCLUDING 100mm
OF ALL VERTICAL WALLS.

2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL
HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.

THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE
STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE
OF THE FILL.

THIS BARREL STANDARD TO BE USED ONLY ON TRIPLE BARREL CULVERTS LESS
THAN 2.439m VERTICAL CLEARANCE ON 45° SKEW AND TO BE USED WITH
STANDARD WING SHEET FOR THE SAME SKEW AND VERTICAL CLEARANCE.

DIMENSIONS FOR WING LAYOUT AS WELL AS ADDITIONAL REINFORCING STEEL
EMBEDDED IN BARREL ARE SHOWN ON WING SHEET.

TRANSVERSE CONSTRUCTION JOINTS SHALL BE USED IN THE BARREL, SPACED
TO LIMIT THE POURS TO A MAXIMUM OF 21.0m. LOCATION OF JOINTS SHALL
BE SUBJECT TO APPROVAL OF THE ENGINEER.

STEEL IN THE BOTTOM SLAB MAY BE SPLICED AT THE PERMITTED CONSTRUCTION
JOINT AT THE CONTRACTOR'S OPTION. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES
SHALL BE PAID FOR BY THE CONTRACTOR.

AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL
IN THE INTERIOR FACE OF EXTERIOR WALL AND BOTH FACES OF INTERIOR WALLS
ABOVE LOWER WALL CONSTRUCTION JOINT. THE SPLICE LENGTH SHALL BE AS PROVIDED
IN THE SPLICE LENGTH CHART SHOWN ON THE PLANS. EXTRA WEIGHT OF STEEL DUE
TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.

AT THE CONTRACTOR'S OPTION HE MAY SUBMIT, TO THE ENGINEER FOR APPROVAL,
DESIGN AND DETAIL DRAWINGS FOR A PRECAST REINFORCED CONCRETE BOX CULVERT
IN LIEU OF THE CAST-IN-PLACE CULVERT SHOWN ON THE PLANS. THE DESIGN SHALL
PROVIDE THE SAME SIZE AND NUMBER OF BARRELS AS USED ON THE CAST-IN-PLACE
DESIGN. FOR OPTIONAL PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL
PROVISIONS.

TOTAL STRUCTURE QUANTITIES

CLASS A CONCRETE

BARREL @ _____ m³/m _____ m³

WINGS ETC. _____ m³

TOTAL _____ m³

REINFORCING STEEL

BARREL _____ kg

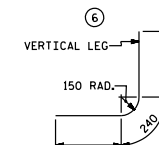
WINGS ETC. _____ kg

TOTAL _____ kg

CULVERT EXCAVATION ----- LUMP SUM

FOUNDATION COND. MAT'L ---- METRIC TONS

LOCATION SKETCH



BAR TYPE

DIMENSIONS ARE OUT TO OUT

PROFILE ALONG CULVERT

PROJECT NO. _____

_____ COUNTY

STATION: _____

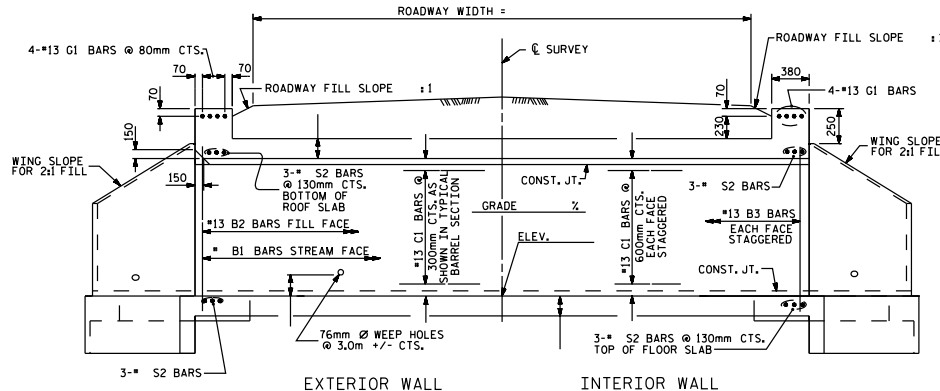
SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
BARREL STANDARD
TRIPLE m X m
CONCRETE BOX CULVERT
WITH VERTICAL CLEARANCE
OF LESS THAN 2.4m
45° SKEW

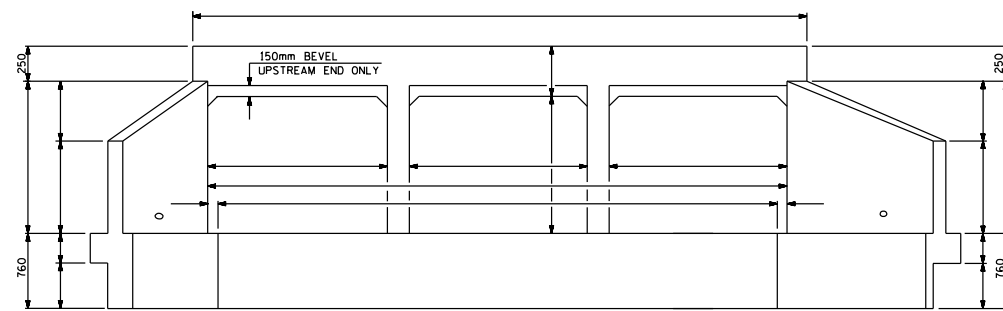
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NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS
2			4			

STD. No. CB345SM

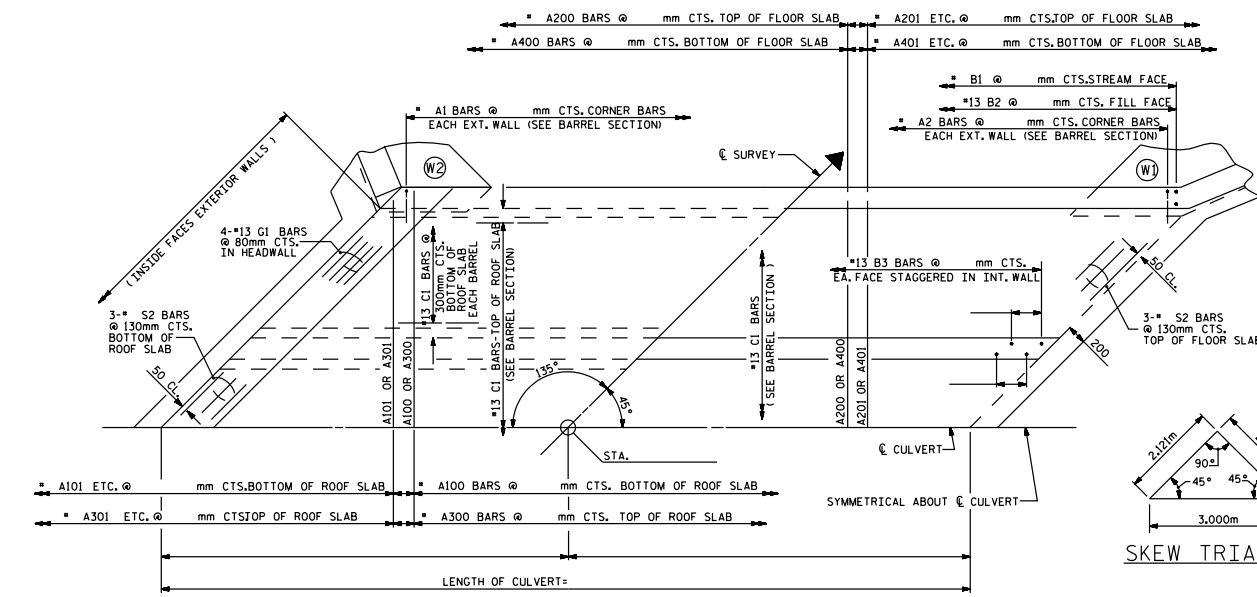
ASSEMBLED BY :	DATE :
CHECKED BY :	DATE :
DRAWN BY : EEM 6/97	
CHECKED BY : ARB 7/97	



EXTERIOR WALL INTERIOR WALL
 CULVERT SECTION NORMAL TO ROADWAY

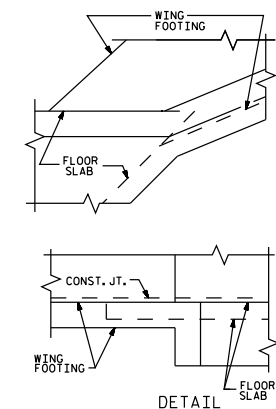


END ELEVATION NORMAL TO SKEW



PART PLAN - ROOF SLAB

PART PLAN - FLOOR SLAB



DETAIL
 CONNECTION OF WING FOOTING
 AND FLOOR SLAB WHEN SLAB
 IS THICKER THAN FOOTING



PROJECT NO. _____
 _____ COUNTY
 STATION: _____

SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 BARREL STANDARD
 TRIPLE m X m
 CONCRETE BOX CULVERT
 WITH VERTICAL CLEARANCE
 OF LESS THAN 2.4m
 45° SKEW

REVISIONS				SHEET NO.	
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

STD. No. CB345SM

DRAWN BY : _____ DATE : _____
 CHECKED BY : _____ DATE : _____